

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number
WO 2005/057769 A1

(51) International Patent Classification⁷: **H02M 3/335**

(21) International Application Number:
PCT/GB2004/005124

(22) International Filing Date: 7 December 2004 (07.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0328504.6 9 December 2003 (09.12.2003) GB

(71) Applicant (for all designated States except US): NUJIRA LTD. [GB/GB]; Unit 6 and 7, Grange Park, Broadway, Bourn, Cambridge CB3 7TA (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): WILSON, Martin, Paul [GB/GB]; 20 West Drive, Caldecote, Cambridgeshire CB3 7NY (GB).

(74) Agent: WILLIAMS, David, John; Page White & Farrer, 54 Doughty Street, London WC1N 2LS (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

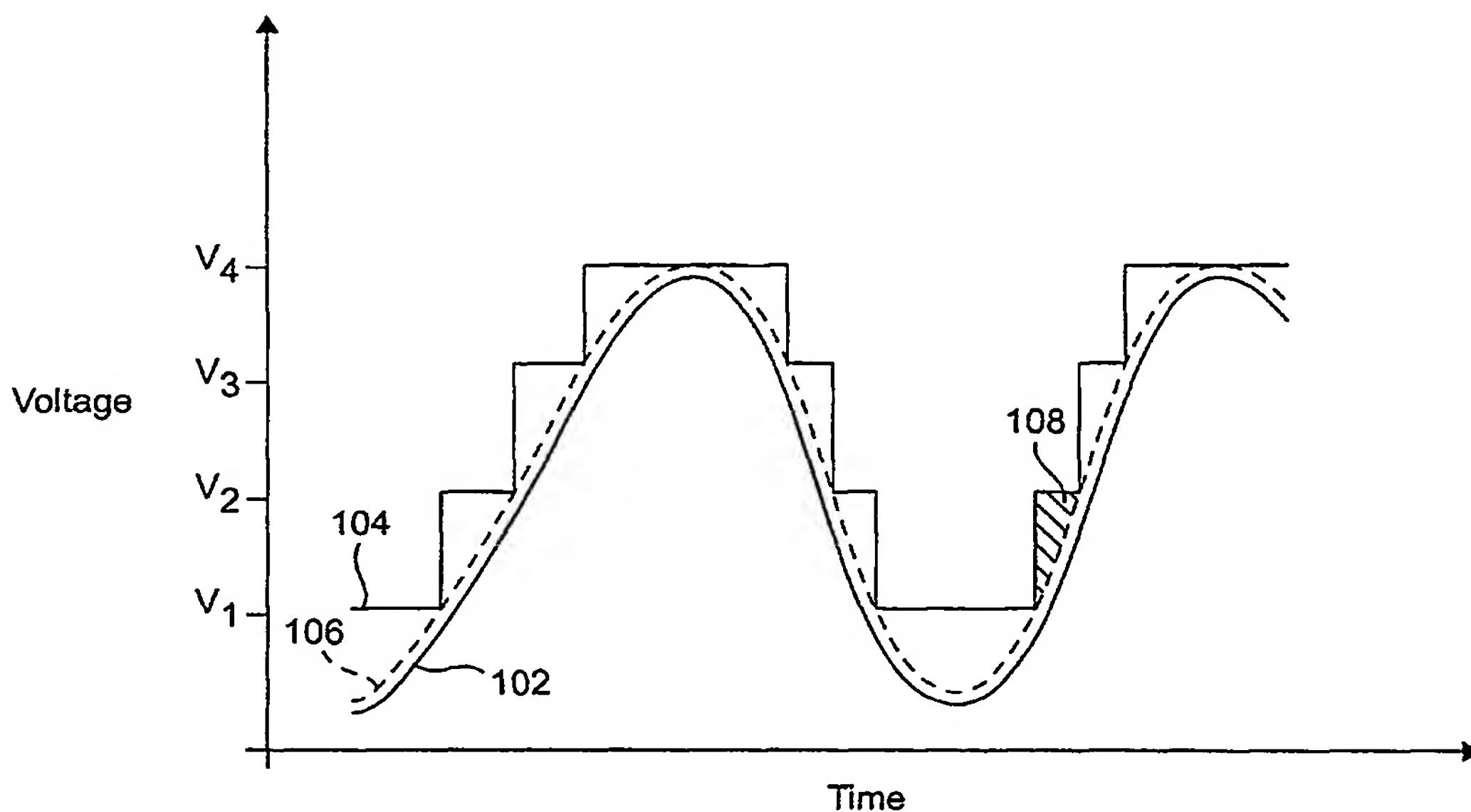
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: TRANSFORMER BASED VOLTAGE SUPPLY



WO 2005/057769 A1

(57) Abstract: There is disclosed a voltage summer including a transformer having a primary side and a secondary side, wherein a first voltage to be summed is connected to the primary side and a second voltage to be summed is connected to the secondary side. There is further disclosed a transformer comprising a primary winding and a secondary winding and having a turns ratio of primary winding to secondary winding of x:y, providing x turns in series in the primary winding and providing y turns in series in the secondary winding; providing an equal number of turns in the primary and secondary windings; and closely coupling each primary winding turn with a secondary winding turn.



- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.